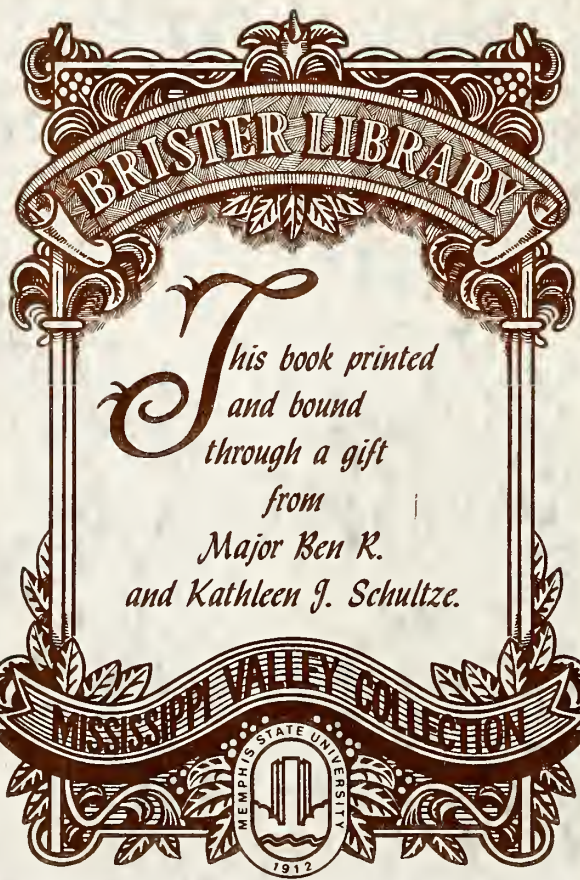


ORAL HISTORY OF THE TENNESSEE VALLEY AUTHORITY
INTERVIEWS WITH
RICHARD O. NIEHOFF

BY - CHARLES W. CRAWFORD
ORAL HISTORY RESEARCH OFFICE
MEMPHIS STATE UNIVERSITY



*This book printed
and bound
through a gift
from
Major Ben R.
and Kathleen J. Schultze.*

76345651 017 8/4/92



MEMPHIS STATE UNIVERSITY
LIBRARIES

MVC
TC
425
T2
N53x
1970

UNIVERSITY OF MEMPHIS LIBRARIES
3 2109 00699 6905





ORAL HISTORY OF THE TENNESSEE VALLEY AUTHORITY

INTERVIEWS WITH RICHARD O. NIEHOFF

MARCH 5, 1970

BY CHARLES W. CRAWFORD

ORAL HISTORY RESEARCH OFFICE

MEMPHIS STATE UNIVERSITY



MEMPHIS STATE UNIVERSITY
ORAL HISTORY RESEARCH OFFICE

I hereby release all right, title, or interest in and to all of my tape-recorded memoirs to the Mississippi Valley Archives of the John Willard Brister Library of Memphis State University and declare that they may be used without any restriction whatsoever and may be copyrighted and published by the said Archives, which also may assign said copyright and publication rights to serious research scholars.

PLACE East Lansing, Mich.

DATE March 5, 1970

Ronn

(Interviewee) R. O. NIEHOFF

Charles E. Crawford

(For the Mississippi Valley Archives
of the John Willard Brister Library
of Memphis State University)



THIS IS THE ORAL HISTORY RESEARCH OFFICE OF MEMPHIS STATE UNIVERSITY. THIS PROJECT IS "AN ORAL HISTORY OF THE TENNESSEE VALLEY AUTHORITY." THE PLACE IS EAST LANSING, MICHIGAN. THE DATE IS MARCH 5, 1970, AND THE INTERVIEW IS WITH MR. RICHARD NIEHOFF, FORMERLY WITH THE TENNESSEE VALLEY AUTHORITY. THE INTERVIEW IS BY DR. CHARLES W. CRAWFORD, DIRECTOR OF THE MEMPHIS STATE UNIVERSITY ORAL HISTORY RESEARCH OFFICE.

CRAWFORD Mr. Niehoff, I suggest that we start by getting some background first, beginning, if you like, with the time and place of your birth, a summary of your early life, your education, and your activities before joining TVA.

NIEHOFF Good. I was born on September 25, 1907 in Quincy, Illinois. I grew up there and went to an elementary parochial school, a Lutheran school. I continued on in Quincy through high school. I was active in high school activities in various capacities, was president of my class and was active in all activities except sports. I went to college in Chicago at the YMCA College, now called George Williams College, located at Downers Grove, Illinois. The college was then, and to a certain extent still is, a training institution for persons in informal social work, youth work and related type activities. The institution was a few blocks from the University of Chicago. Many of the faculty members taught at both institutions, and my aspirations started then for graduate work.



In the meantime, however, after serving as an assistant to one of the professors in my senior year (incidentally, I worked my way through school with various jobs), I took a position with the northwest branch of the Milwaukee YMCA, where the professor with whom I had worked was conducting a study of adolescents, financed by the Rockefeller Foundation. The study involved a series of social and anthropometric measures of adolescents, the same adolescent boys, over a three-year period. This was unusual in the field of research, because prior to that adolescent studies were horizontal studies of ten, eleven, twelve, thirteen-year-old boys, many of them in institutions.

After three years, at the completion of this research, I resumed my studies as a graduate student at the University of Chicago with a fellowship in the Department of Education, and with the full opportunities of the Hutchins' regime, which allowed for a tremendous amount of intellectual exploration. Although I was a student in education, I took work in sociology, political science, economics, anthropology, drama, and various other subjects. I completed work for the Master's Degree with a study of Recent Social Trends, with two of the members of the Hoover Commission serving on my Master's Degree committee. I stayed long enough to complete the preliminaries for my Ph.D. By that time the events and the developments of the depression, especially those at the TVA about which I had read with a great deal of interest, were coming into my consciousness. About a year before I completed my prelim's for the Ph.D., I was married to a teacher from the University Laboratory School. At the first opportunity, which was a complete surprise to me, I was invited to come to the TVA for an interview.



The connective tissue, I presume, that brought me to the TVA, was the fact that I was a student of John Dale Russell, who was a colleague of Floyd Reeves. The two had jointly undertaken research, particularly in the field of the evaluation of higher education. There was an opening at TVA which was called to the attention of John Dale Russell, and he in turn inquired as to whether or not I would be interested. Indeed I was. As I said, my "wheels were already turning," although I had no hopes that I could get a position with the TVA. Actually, I wasn't an applicant for a job at the TVA, but on a particular day just shortly before Thanksgiving in 1935, I was asked to come to TVA at Knoxville to be interviewed, which I did.

CRAWFORD Let's go back and get a few other facts, before we get into TVA. What was the nature of your study at YMCA College? What were the topics? What were the influences there?

NIEHOFF The topics were essentially centered, I would say, as much as anything on human behavior and education. Education particularly as it would be expressed in situations where children and adults were essentially not concerned with formal requirements, degrees, or other kinds of criteria or achievement of that sort, but it was essentially geared to interests on the part of the participants, be they juniors or seniors. They were mostly juniors, as a matter of fact, as far as I remember. Activities were basically educational in character, but not structured as they would be in the schools. They included, for example, a camp experience, an athletic league, or a boy's club. They were activities of that character. This



was the essential orientation. However, there were a fair number of courses related to religion, and I must say they were largely of a quite liberal character. Two of my teachers, for example, from the University of Chicago, were translators of, respectively, the Old and New Testaments. My principal professor was a University of Chicago Ph.D. with a degree in the psychology of religion.

The important thing about this is that although it was a small institution and had a kind of a restricted curriculum, officially at least, it was, as I look back on it now, an excellent institution of high quality with courses and experiences that were later useful, particularly in terms of understanding humans working with other human beings and informal educational processes.

CRAWFORD You did have a distinguished faculty there, didn't you?

NIEHOFF It was quite distinguished. Small, but distinguished.

It was entirely a male institution while I was there, and it happened that most of the fellows there were very hardworking men. Most of them were working their way through. The standards were high. Any course taken at the college which had a comparable course at the University of Chicago was transferred without a loss of credit, so that when I went to the University of Chicago later on I had approximately a little bit more than three years toward a Bachelor's Degree, which I took at the university. So I have a Bachelor of Philosophy Degree at Chicago, a Master of Arts, and I have completed my course work for the Ph.D.



CRAWFORD Wasn't adult education as a field of interest comparatively new at that time?

NIEHOFF Indeed, it was shaping up, so to speak, as a field of interest. When I attended the University of Chicago I took a variety of courses with course papers as the principal criteria of accomplishment. In those courses, where that opportunity presented itself, I wrote papers on various aspects of adult education. This indeed was a very useful decision. Even though I did not anticipate work with the TVA, it turned out to be very useful indeed. It was a useful bridge to the kind of employee adult education which TVA was interested in establishing and structuring as a part of the personnel system.

CRAWFORD What other things did you do while you were receiving that education? I believe you worked. What sort of work did you do, and what sort of extra-curricular activities did you engage in?

NIEHOFF There wasn't much time for very much extra-curricular activity, except work. I did some work as an assistant to a professor of school law. This was during the University of Chicago period. Earlier I worked at the YMCA in downtown Chicago for three years. I was a director of summer camps at two different YMCA camps in Chicago, one in Michigan and the other up in northern Wisconsin. My fourth year, my final senior year, at George Williams, I was the assistant to Doctor Hedley Dimock who, as I indicated, was the director of this adolescent psychology study.



CRAWFORD What were your most important subjects and what did you learn that was most important at the University of Chicago?

NIEHOFF That's a hard one to answer, I guess, because it seems that with my stage of intellectual growth and with my superb teachers at the University of Chicago, it was difficult to say what I was most interested in and what was the most exciting. I was an excited and interested graduate student. I will admit that. Charles Merriam, the Chairman of the Political Science Department, was a teacher of a course in recent political theory. Paul Douglas, later Senator Douglas, was a professor of economics who gave a seminar in "isms", economic "isms" which attracted me a great deal. I also found work in anthropology, sociology, philosophy and drama to be very interesting. I became very excited about John Dewey and even corresponded with him and received two autographed books of his.

My Master's thesis, which of course was no great deal, was on the report of President Hoover's Commission on "Recent Social Trends," the staff for which was provided very substantially from the University of Chicago faculty. The cultural, political, social and economic purpose of this Hoover Commission Report was to examine the various trends in America between 1890 and 1930, a 40-year period, which was regarded by most social scientists as an extremely yeasty period of American life. The frontier was pushed back, cities were established, labor unions came into being, public education was established on a sure footing, there were trends and changes in family life, in our economic system, etc., which in effect, all came into a kind of



reappraisal (perhaps not unlike our present reappraisal of economic and social life) because of the Great Depression. This had a great effect on America generally. It had a distinctive intellectual and broadening effect on me.

My thesis work, principally, was to analyze that very large volume of work and to reduce each of about 50 chapters to ten generalizations each. Then I examined what was being taught in the American secondary schools (largely with the textbook method) to see the extent to which these generalizations were reflected in these textbooks, which formed the principal social science subject matter in instructional programs for American adolescents. It was, of course, not perhaps a completely unrelated event that some of the proposed remedies for some of the social and economic ills that were being then advocated and enunciated by the New Deal were included, if you please, in the TVA programs.

One of the rich experiences of this period, for example, was to be a student of T. V. Smith, a professor of philosophy. I heard him make his first political speech in a neighborhood church as a candidate for the House of Representatives of the State of Illinois. He was a very distinguished congressman, who added a kind of a John F. Kennedy degree of intellectual quality and so forth to his congressional career. Perhaps it is also an interesting note that he was a one-termer. But it was an alive place, and in particular, I had all the opportunities and all of the encouragement of the faculty of the Department of Education to shop around and to take these courses for credit or non-credit, as I chose. I actually took most of them for credit, although they were graduate courses in a field in which I was not a regular candidate,



because they all had first-class teachers and because in those times I found the environment of the University of Chicago to be an extremely alive and interesting place.

CRAWFORD What social and political ideas did you form at this time? What was your own personal philosophy as you developed it at this period?

NIEHOFF Well, it certainly was not a partisan thing. I referred to T. V. Smith as a candidate and a winner as a Democrat, but I really was not partisan in my political views. As far as a political bias was concerned, anybody who could describe a problem and offer a solution was of interest to me. Perhaps it was the orientation of earlier training. The fact that I grew up as a boy in a family of limited means might have had something to do with it. My father happened to have had an unusual accident and was killed by a runaway horse when I was three, so I grew up in a situation in which our economic means were severely restricted. That combination, plus the fact that I was, perhaps by some selective factor, concerned with human concerns (in contradistinction to engineering, let's say), plus the nature of the times, the stimulating environment of the University of Chicago and these great social science teachers, gave me a particular sensitivity to approach the concept of TVA, about which I had been reading, with more than casual concern and casual interest.

CRAWFORD What was your view toward the New Deal, in general?

NIEHOFF I think it was distinctly positive. I was the one who got an enormous emotional, and I think intellectual, life from

No.		Name		Sex		Age		Height		Weight		Cephalic Index		Facial Index		Stature		Arm		Forearm		Hand		Foot		Index		Middle		Ring		Pinky		Thumb		Nose		Mouth		Lips		Chin		Ears		Eyes		Iris		Pupils		Sclera		Cornea		Lacrimal		Tears		Saliva		Sweat		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis		Scrotum		Testis		Prostate		Urethra		Bladder		Kidney		Liver		Gallbladder		Pancreas		Spleen		Lung		Heart		Aorta		Ventricle		Artery		Vein		Capillary		Nerve		Brain		Spinal		Cerebrum		Cerebellum		Medulla		Nerve		Muscle		Bone		Cartilage		Joint		Ligament		Tendon		Fascia		Skin		Hair		Nails		Teeth		Gums		Tongue		Throat		Larynx		Trachea		Esophagus		Stomach		Intestine		Rectum		Uterus		Vagina		Cervix		Vulva		Clitoris		Penis	
-----	--	------	--	-----	--	-----	--	--------	--	--------	--	----------------	--	--------------	--	---------	--	-----	--	---------	--	------	--	------	--	-------	--	--------	--	------	--	-------	--	-------	--	------	--	-------	--	------	--	------	--	------	--	------	--	------	--	--------	--	--------	--	--------	--	----------	--	-------	--	--------	--	-------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--	---------	--	--------	--	----------	--	---------	--	---------	--	--------	--	-------	--	-------------	--	----------	--	--------	--	------	--	-------	--	-------	--	-----------	--	--------	--	------	--	-----------	--	-------	--	-------	--	--------	--	----------	--	------------	--	---------	--	-------	--	--------	--	------	--	-----------	--	-------	--	----------	--	--------	--	--------	--	------	--	------	--	-------	--	-------	--	------	--	--------	--	--------	--	--------	--	---------	--	-----------	--	---------	--	-----------	--	--------	--	--------	--	--------	--	--------	--	-------	--	----------	--	-------	--

F.D.R.'s "Fireside Chats." I believed as he did that the problems of the Southern cottongrower had some relevance for the New York clothing manufacturer. I saw more clearly, for example, the vital relationships between industry and agriculture. I accepted the importance of maintaining our basic capitalistic system, but with new social inputs, new social protections, and new economic incentives. Furthermore, I believed that it was necessary for people to have permanent and useful employment with fair wages and some protection from hazards over which they had no control and that out of this economic opportunity within an environment of freedom people will achieve their highest potential. In effect, I believed in helping establish an environment in which people who had the ambition and skill could rise to the top, but not over the backs of people with somewhat poorer circumstances and perhaps less good resources and educational opportunities.

CRAWFORD Did you interrupt your schooling for work or any other activity between the time that you started and 1935?
Did you go to school each year?

NIEHOFF From 1929, when I graduated from college, until 1932 I worked in the northwest branch of the Milwaukee YMCA.

CRAWFORD Were you taking courses of any kind then?

NIEHOFF Yes, I did. I did take a course in comparative religion from Dr. A. Eustace Haydon, another distinguished University of Chicago professor who was teaching at the Milwaukee



Extension, Division of the University of Wisconsin, and who was the teacher of my professor, who was directing the adolescent study to which I referred earlier. But apart from that one formal course, I was essentially educating myself through experience and through fairly wide reading. I had learned to become a regular reader of magazines like Harpers and other journals that were contributing to my intellectual growth during that period.

CRAWFORD When you went to Knoxville for your interview in November 1935, how did you go? What were your impressions when you arrived? And what did you think of the personnel that you met at that time?

NIEHOFF Well, it was really quite a dramatic experience. Just prior to receiving the telegram inviting me to come to TVA, a fellow graduate student and his wife invited us to their home in Wisconsin. When the telegram arrived they kindly said, "Let's just change the direction. Instead of going North, let's go South." So we all drove to Knoxville. While I was being interviewed, they drove to the Smoky Mountains. They were in a snowstorm and had a really thrilling experience out of that. I spent all of my day being interviewed by Maurice Seay, who was the director of this division, Gordon Clapp, Arthur Jandry, and I believe George Gant, all of whom became officials and important personages in the TVA. At the conclusion of this whole series of interviews, I was offered what to me was a fantastic and fabulous salary of \$2,300.00 a year. I was as happy as anybody could be. My wife and my friends had a delightful experience in the Smokies during the day, so we had a dandy celebration when we all joined together for evening dinner.



CRAWFORD These people who interviewed you, of course, were evaluating you. You, no doubt, had formed certain impressions of them. What did you think of the people you met at that time?

NIEHOFF Well, I had a clear impression of people who were dedicated to their jobs and who had a sense of mission in bringing TVA into being and into becoming a vital organization. I had an impression of their creativity, originality, and of essentially a fresh and dedicated approach to their work.

I should mention that Floyd Reeves was, I think, among that group of persons who interviewed me. As you may know, he was a professor at the University of Chicago on leave to the TVA, and he was just about to leave the TVA and return to the University of Chicago. So my overlap with him at TVA was of just about a month's duration.

CRAWFORD Had you known him at Chicago?

NIEHOFF I had not known him at Chicago. I knew no one at TVA, as a matter of fact. I had heard of Gordon Clapp and Arthur Jandry. Well, in a sense I knew them slightly, but I am reasonably sure they didn't know me. They were graduate students who were a year ahead of me at the University of Chicago, and we had only nominal acquaintance. I could not claim, as I later did, that they were good friends.

CRAWFORD Was that your first trip to the South?

NIEHOFF It was, indeed.



CRAWFORD What impressions did you get of the section?

NIEHOFF Well, I must say that going through parts of Kentucky, on the route around Lexington, that I was very much impressed with the blue grass country. But as we got around Berea and other southern parts of Kentucky, when the eroding hillsides began to show up in greater numbers as we came closer to Knoxville, I would say it was, indeed, most disheartening. This was the period when all of the trains coming in and out of Knoxville were still burning soft coal. It was dirty, down at the heels, dilapidated, and an essentially unattractive place, which later, some of us at TVA tried to make some modest contributions to change. In my later experiences, I have worked in some of the underdeveloped parts of the world. In retrospect, I would say that Knoxville and some parts of the South that I saw initially, and which I later became better acquainted with, resembled "underdevelopment" generally, as we now think of it in certain foreign countries. It was clearly a depressed part of the United States, and all of the TVA programs related to the improvement of agriculture and forestry, the development of the Tennessee River, etc. They all clearly pointed to a revamping or rebuilding of a portion of the United States that, through no fault of its own, had become a basically depressed problem area.

CRAWFORD You did understand, then, what President Roosevelt meant by, "part of the country ill clothed, ill fed, ill housed?"

NIEHOFF Indeed. It was all spread out in front of you to see and one would have had to have been blind not to. I had read about it. Indeed, I was not, as I have indicated, a person who was



accustomed to affluence, but I was not aware of areas in the United States that had so many problems related to basic agriculture, land use, forestry, and resource development generally.

CRAWFORD Have you felt since that working in that economic situation was a useful training for serving in development in foreign countries?

NIEHOFF Extremely relevant, not only in the specific^s related, for example, to the technique that TVA developed with so called test demonstration farmers, as a way of bridging the gap between what experts in agriculture know and what normal dirt farmers are willing to practice. But also, in the whole mood and approach and importance, if you please, and necessity of defining problems in such a way and relating resources to the solution of those problems which has, as a basic ingredient, the necessity for human adoption of these better ideas--these technically sounder ideas, in order to accomplish some end useful to the individual and to the state. In addition, as you may know, there is no (I would almost make this as a flat assertion), there is no intellectual any place in the world who doesn't know about TVA. So, if one happens to be lucky enough, as I was and am, to have been a "graduate," if you please, of the TVA experience, the reception that one gets in working in other parts of the world is, indeed, all the warmer and all the more cooperative.

CRAWFORD What was your job to be, as you understood it, from the interviews when you arrived in November?

NIEHOFF The job was to fit into a little group of people in the training division, headed by Maurice Seay, who later, as



you may know, became Dean of the Department of Education at the University of Chicago. He later headed the education division of Kellogg Foundation. More recently, he was a professor at Michigan State University, and at the present time is a professor at Western Michigan University. Maurice Seay was the director of the small staff. Miss Mary Utopia Rothrock was the librarian; Miss Virginia White James was in charge of the TVA schools, particularly, I should say, the school at Muscle Shoals. There was present at that time a position of "supervisor of public administration training," which was occupied by Dr. Harold Stoke, who left TVA to become the Associate Dean at the graduate school of the University of Wisconsin. The position was also occupied at a shortly later time by Dr. Lee S. Greene, who is now Chairman of the Department of Political Science at the University of Tennessee. There was also a person in charge of trades training.

My job was to become the junior supervisor of training of white collar workers and professional personnel in the Knoxville area. This covered the headquarters group in Knoxville and the professional groups of foresters and some engineers at Norris. It was reasonably open-ended. There was no prescription, except to devise a program of in-service training for employees in these white collar and professional occupations, which would contribute to their better performance on the job to qualify them for advancement, or for transfer, and to actually create an atmosphere of learning and education within the staff that would have these desirable effects.

Actually, the training had a series of concepts. Some of these, perhaps, evolved through experience and became articulated.



But I might address myself to some of those principal concepts that I think were implicit in the thinking of the TVA leadership of which, in effect, I think we filled out through experience and gave some life to the concept. First of all, training was considered a staff function within the framework of personnel administration. The concerns I indicated were to improve job performance and job satisfaction, and increase qualifications for promotion or transfer. And these were related, indeed, to classification and appointment of personnel, as part of a comprehensive personnel program. We thought of training, not as an event that occurred and was completed with a two week program, let's say, with a certificate at the end which permitted a person to occupy a new job, but essentially as a continuous process that was defined by the person himself. So our job was not, in effect, to create a curriculum, but to create an atmosphere in which the attention of employees was called to various educational opportunities to identify training needs, and with their help to create a program of training to meet those needs.

We did not think of training as an experience of people only in the lower levels: the clerks, the stenographers, the typists, the draftsmen, but as an opportunity and a need from the lowest to the highest levels in the organization. We used to say it was important for a person in the accounting office to avoid arithmetic errors. It was much more important, however, for an executive of TVA to avoid policy errors. Therefore, there was no particular clientele that escaped the need for training or the potentiality of participating in some appropriate training activities for their particular needs and their particular interests. We had what one might call an "open curriculum."



As the program evolved, there were opportunities to receive credit for some formal courses, largely through association with the University of Tennessee. But there were a host of non-credit courses or activities, which people took essentially for fun or for some generalized belief that the participation in the activities would be of some importance to them. I think we could say it was essentially flexible, nondoctrinaire or nonpedagogical. I will illustrate some of the principles with some actual activities that will, I believe, bear this out. As a part of TVA's general philosophy, we did everything we could with and through the participation of local institutions.

We made every effort to conduct our program in collaboration with local institutions, for example, although TVA had a very distinguished engineering staff, many of whom came from universities and more of whom could, indeed, have graced the faculty of any distinguished university, we did not elect to develop an engineering school of our own. Rather, we worked in close collaboration with the Dean of the College of Engineering, the Graduate School and other officials at the University of Tennessee and the professors in the College of Engineering, to arrange courses which were taught by their professors and persons from TVA who became adjunct professors at the University of Tennessee.

It might be interesting in this connection to comment on how a person who had never attended a university or college with an engineering department might have the bravery of working with engineers, and developing in collaboration with them what turned out to be an extremely large and significant program in part-time graduate engineering. It was described by Dean Farris and myself in the December,

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1870-1871

1939 issue of Mechanical Engineering.

First of all, let me say that engineers, like others in the TVA, were very pleased to have a job in an organization that had a creative mission, as TVA did, to do something novel in the field of engineering, namely, to create a multiple purpose river development system, which by statute and by engineering ingenuity would achieve the greatest possible benefits for flood control, navigation, and power. This was a big challenge to the engineers. As indicated, they were well chosen and well motivated to do this creative job.

But how would a person enhance this desire, on the part of engineers, to do a good job? How would you organize the work and how would you develop an educational program to help realize the goal? I suppose quite by accident one of the principal sources of ideas that came to my attention was the publication of the "Society for the Promotion of Engineering Education," which I found to be concerned with the education of the professional engineer: how he could perform more effectively, not only as an engineer, but as a citizen.

I read these journals, and it also happened that the Journal of Mechanical Engineering repeatedly published articles on the needs of the engineer for the kind of postgraduate and informal training that would make him more efficient. These ideas, in effect, were discussed with people like Sherman Woodward, who had come to TVA from the University of Iowa, with Colonel Parker, who went from TVA to become Chairman of the Civil Engineering Department at MIT, and James Bowman, Calvin Davis, and the other leaders in the engineering field. I also had the advice and counsel of a committee of engineers from the engineering department, with whom I met frequently and whose executive secretary I became. The combination of ideas or hypotheses



for possible training activities which I tossed into the hopper and to which they reacted and, more importantly, the suggestions that they themselves made, plus the informal advice and counsel which I received from people like Sherman Woodward, made it possible at least to identify subject matters and names of possible courses or non-credit activities, some of which were already being given at the University of Tennessee, and some of which were not.

Our procedure was to prepare a periodic bulletin that listed various educational possibilities of a credit and non-credit character, which was distributed to all TVA employees. Those who were interested in any of the activities responded by questionnaire to my office. Those activities in which sufficient interest was shown were developed into activities or courses, either on an informal, non-credit basis, or as courses, mostly graduate, which were offered in collaboration with the University of Tennessee. I found as I got better acquainted with the engineers, that some of them had, in the course of their professional careers, graduated, let's say, in mechanical engineering, but that their first jobs were often (I later found that this was not unusual) in some other branch of engineering. Accordingly, they found that they had some professional deficiencies or gaps. Thus, much of the motivation was to chink in, so to speak, deficiencies between their formal programs of education as students and their experiences and needs as professional engineers.

Furthermore, some of the engineers, particularly of a slightly older age, had missed some new developments in engineering. A particular field that always intrigued me because of its interesting name, namely "statically indeterminate structures," was a then new concept of engineering design in which some of the older engineers had



not been trained. This course turned out to be one of our most popular courses. But this description of the engineering group is purely an illustration of one group of employees that happened to be an extremely responsive group who were very active in taking graduate engineering courses.

But, as I indicated, the Society for the Promotion of Engineering Education commented on a variety of learning needs of engineers, which were not technical in character. I think the engineers, in part, were annoyed that some of their deficiencies kept them from getting jobs which lawyers, and perhaps others more articulate than they, were able to get.

Public speaking was an example. The inability of a typical engineer to speak on his feet was mentioned fairly repeatedly in these reports of training needs of engineers. And it was not surprising, therefore, that one of the activities to which the engineers responded was informal courses (that we developed without instructors) in public speaking. The simple notion was that people will learn to speak by speaking. And if we could create situations artificially, if you please, where persons spoke more often than they normally would, some additional skill in speaking could be developed. In other words, ^{if} we provided opportunities to participants to make a speech one every couple of weeks to an audience of peers, who would tell them what was wrong with their speech, why it lacked interest, or was otherwise less than a thrilling kind of a thing to listen to, in due course they would improve their capability to deliver good speeches.

This was not only something that was attractive to engineers, but quite a number of the high officials of TVA, including



the Director of Personnel, who were called upon fairly often to give speeches in the valley or outside or to give testimony in Congress or before other groups. A number of these persons of high professional and managerial responsibility within the TVA likewise responded to these opportunities to participate in public speaking clubs. In fact, one of them carried on with biweekly meetings for several years. As I indicated, they were informal. We started out by meeting at each others homes. The ladies worked out a deal that no dinner could cost more than 35 cents per capita and we went through this drill faithfully, giving introductions and speeches of short, long, and medium duration, with the group commenting on the deficiencies of the speech with the expectation, indeed, that they would do better next time.

Well, that's perhaps going too far with that one set of ideas. My office, incidentally, consisted of myself and a secretary. We were aided by advisory committees appointed by the respective heads of departments with whom we worked. We distilled out of these deliberations and consultations the listings of opportunities which were publicized in bulletins of opportunities, which I described above. Incidentally, all of the activities were conducted after hours. If any costs were involved, the employee paid his own costs. The only TVA contribution was my services.

Let me just note that in the announcement of "Educational opportunities for TVA employees located in the Knoxville area, September, 1940" there were about 40 courses or groups that had been conducted in the previous year, 1939-40, with a total enrollment of approximately 700 employees. This would almost be the equivalent of a small college. Let me just pick some courses at random from this announcement. In the field of engineering: the hydraulics of flood



control, statically indetermined structures, fluid mechanics, power systems, advanced mathematics, chemical engineering economics, and refrigeration. In the non-credit type of activity: test construction, rapid reading, conversational French, keeping mentally healthy, truth and fable in psychology. It was, indeed, a wide range of activities that were popularly participated in. Going back to an earlier comment about the kind of place Knoxville was, at the time many of us came to the Tennessee Valley area to join our colleagues from the South, perhaps part of the attractiveness of some of these courses was just to make life a little bit more exciting and pleasant, there not being so many other alternatives at that particular time to occupy the time and attention of an interesting and mentally alive group of people.

CRAWFORD I gather there was not a great deal to do in Knoxville.

NIEHOFF There was not, indeed. For example, although the University of Tennessee had a very short kind of concert series, there were a large number of employees and their families who wanted to hear good music much more often. So a particular individual, an electrical engineer, who had some very good electronic equipment and records of classical music, was willing to make them available for a series of concerts, which we held for TVA employees and all other citizens in a Knoxville church which had extremely good acoustics. We would announce these symphonic programs publicly. The concerts were held as if there were a leading orchestra present and people would come, hear a few hours of good music, and leave as if they had been to a live concert. This was one of these little efforts to sort of enrich living opportunities in Knoxville and to set the stage for a later and very much wider popular support for a University of



Tennessee concert series and for the Knoxville Symphony Orchestra, which provided a much better avenue of interests for those persons with musical tastes.

In addition to this kind of educational activity, we had regular luncheon meetings we called orientation programs. These series of luncheons, which we held for all employees at all levels from clerks to executives, were conducted three or four times a year. A series usually took ten or a dozen meetings, which were addressed by the directors of TVA, the general manager, and other principal officials. The purpose of the series was to acquaint all employees with the major purposes of TVA, the principal programs, some of the problems, administrative methods, the point of view, and the essential purposes that we were all trying to achieve. The series, repeated year after year, made it possible for all employees to sense what was going on in the total organization, to respond to questions that might have been raised by their neighbors and other citizens, and to achieve a high level of understanding and capability for what, in TVA, was called "self coordination." The process of equipping each employee with sufficient knowledge of the general policies and the programs of the several departments and divisions was to help them conduct their work with a maximum of coordination and a minimum of friction or misunderstanding. This educational process was considered by general management to be an important ingredient in achieving the ideas of "self coordination."

I've mentioned the in-service and the general education type courses and activities for engineers. Now let me speak of a highly technical seminar that developed which, I believe, would be

THE UNIVERSITY OF CHICAGO

CHICAGO, ILLINOIS

DECEMBER 15, 1954

TO THE PRESIDENT OF THE UNIVERSITY OF CHICAGO

FROM THE FACULTY OF THE UNIVERSITY OF CHICAGO

RESOLUTION OF THE FACULTY

ON THE MATTER OF THE

RECENT ACTIONS OF THE BOARD OF TRUSTEES

AND THE CHAIRMAN OF THE BOARD OF TRUSTEES

IN REGARD TO THE

RECENT ACTIONS OF THE BOARD OF TRUSTEES

AND THE CHAIRMAN OF THE BOARD OF TRUSTEES

IN REGARD TO THE

RECENT ACTIONS OF THE BOARD OF TRUSTEES

AND THE CHAIRMAN OF THE BOARD OF TRUSTEES

IN REGARD TO THE

RECENT ACTIONS OF THE BOARD OF TRUSTEES

AND THE CHAIRMAN OF THE BOARD OF TRUSTEES

IN REGARD TO THE

RECENT ACTIONS OF THE BOARD OF TRUSTEES

AND THE CHAIRMAN OF THE BOARD OF TRUSTEES

IN REGARD TO THE

evaluated as one of the more creative efforts undertaken in or out of universities. The origin of the seminar was a query raised by the chief engineer, Colonel Parker, as to whether it would be possible to document in scientific, objective, and scholarly language the differences that occur when an engineering organization under a mandate, a legal requirement set forth in the Act, is required to develop a whole river system to the maximum potential for the statutory purposes of flood control, navigation, and power, and for all the related purposes which a developed stream could serve, like recreation, water supply for municipalities and industry, and other related purposes.

Well, this notion, this problem, was chewed on by the engineering training committee, headed by Calvin Davis, who, when he left TVA, became president of the Harza Engineering Company. We evolved an arrangement under which the principal personnel of the engineering organization, for example the person in charge of the power program, would attempt to state the differences that are required in the design and operation of power facilities, because the statutory purposes of flood control and navigation had to be accommodated. By the same token, what difference does it make to the navigation program to have these other two purposes a part of the total scheme, etc. Well, in order to cover all of the basic subjects, it took about thirteen lectures. Concurrently, during the three months while these lectures were being delivered (at the rate of one each week), committees of five engineers each studied ten major river systems in the United States, like the Central Valley of California, the Delaware, the Brazos, and others. The plan for the seminar was that

ORIGINAL ARTICLES	1
REPORTS	1
EDITORIAL	1
DEPARTMENTS	1
SYMPOSIUM	1
BOOK REVIEW	1
NOTES	1
ANNOUNCEMENTS	1
ADVERTISEMENTS	1

ORIGINAL ARTICLES	1
REPORTS	1
EDITORIAL	1
DEPARTMENTS	1
SYMPOSIUM	1
BOOK REVIEW	1
NOTES	1
ANNOUNCEMENTS	1
ADVERTISEMENTS	1

ORIGINAL ARTICLES	1
REPORTS	1
EDITORIAL	1
DEPARTMENTS	1
SYMPOSIUM	1
BOOK REVIEW	1
NOTES	1
ANNOUNCEMENTS	1
ADVERTISEMENTS	1

the lectures, combined with the study of these committees, would produce, as an intellectual and professional exercise, the best plan for each of these river systems for varied multiple purposes.

The work on the Central Valley of California project was of such quality that the document produced by the committee was actually used in a conference in the White House between David Lilienthal, Franklin Roosevelt and the then Governor of the State of California, when they were creating the plan for the Central Valley. Given the particular political situation at the time, the production of plans, even as exercises, for ten river systems, might have been misunderstood. The intent here was not for the TVA to create a series of schemes and plans for ten American river systems, which we would move into and take over, but basically as an intellectual professional exercise in which we would try to make clear for ourselves and for students of engineering what is involved when you take on a problem of creating plans for the maximum development of multi-purpose river systems.

Well, it was quite clear that there were other than engineering aspects that are involved in a program of this character. So a second year of the seminar was devoted to the non-engineering aspects of multiple purpose river development systems, and for the first time we used persons outside of our immediate TVA family. Charles Kneir from the University of Illinois spoke on the politics of multi-purpose river systems; Abel Wolman from Johns Hopkins spoke on various aspects of water quality and related subjects, and a third professor, James C. Bonbright from Columbia University, who happened



to be chairman of the St. Lawrence Seaway, and an expert on the economics of utility rates, spoke on these aspects of comprehensive river development programs. The rest of the lectures in the second year were given by David Lilienthal on various policy problems, Gordon Clapp on general management, and a number of staff experts in such subjects as recreation, even scenic resources, that are enhanced as a result of creating a series of impoundments that make for beautiful waterways. These collected papers, constituting several hundred pages, were duplicated and paid for by the employees who participated. And all the activities, both the preparation and the preservation of the research papers, and the lectures, occurred after hours.

CRAWFORD What expenses did the TVA assume? Who, for example, paid the instructors in the various courses and activities?

NIEHOFF When instructors were used (in contrast to the public speaking clubs and other such activities), a fee schedule was developed. If they were University of Tennessee courses for credit, the regular University of Tennessee schedule applied. If they were courses of a non-credit character, we had a sort of a horseback arrangement of providing an honorarium of 50 to 200 dollars, depending on how many lectures and discussion groups were held. We divided the amount that it took to give an instructor an honorarium with the number of people who enrolled in the course. We also decided on a minimum number for each course. Generally speaking, we were shooting for something like five, six, or seven dollars for the non-credit courses, and as I indicated, the tuition for credit courses was based



on the regular fee schedule of the University of Tennessee. Employees who enrolled in any course or activity paid all the costs of instruction.

In addition to courses, as such, we had some other programs. For example, there were special training programs for personnel assistants and for public administration assistants. Let me explain how the program for public administration assistants developed, who participated in this program, what the purposes were, and how the work experience program was carried on. It was the general manager's view (this was Mr. Clapp, who was then general manager) that most management decisions should be made in the departments and the divisions. If this were done well, the number of problems that came to his desk would be reduced, particularly those of a character where one department or division was, essentially, planning to engage in a program which had obvious relationships to other divisions or departments, which had not been consulted prior to the development of the program. Therefore, when these problems came to the general manager's office, he had a choice of either doing that kind of coordination himself, or referring the problem back to the divisions or departments and, in a sense, getting them to do their "homework." It was not the intention of the general manager to create a super-staff in his office. It was minimum in number and essentially concerned with policy problems of a character that required special coordinative efforts or, perhaps, even an adjudication of claims, which could not be resolved by anyone below the general manager.

Now, in order to accomplish the objective of "decentralized management," we set up a one year apprenticeship in public administration



training for a limited number of bright young men from graduate schools of American universities who were interested in general management. The apprenticeship, essentially, required mastering a series of selected readings on TVA and on management and in engaging in a number of assignments in the various departments and divisions in order to become thoroughly familiar with the character of their work. At the end of their period of apprenticeship and rotation, they were assigned to the general manager's office, with such duties as making up agenda for meetings held in the general manager's office, or for meetings of the Board. They were responsible for assuring that the proper papers were put together, so that the general manager and the Board, with a minimum of time and a maximum of efficiency, could arrive at a proper conclusion and decision about the issues that these papers documented. It might be interesting to note who participated in this program. Three names come to mind of persons who went through this training. One was James Ramey, who is now a commissioner of the U.S. Atomic Energy Commission, another is Norman Wengert, who is the chairman of the Political Science Department at the University of Colorado, and a third was Leonard Reichle, who is head of the atomic energy section of a principal engineering firm in New York City.

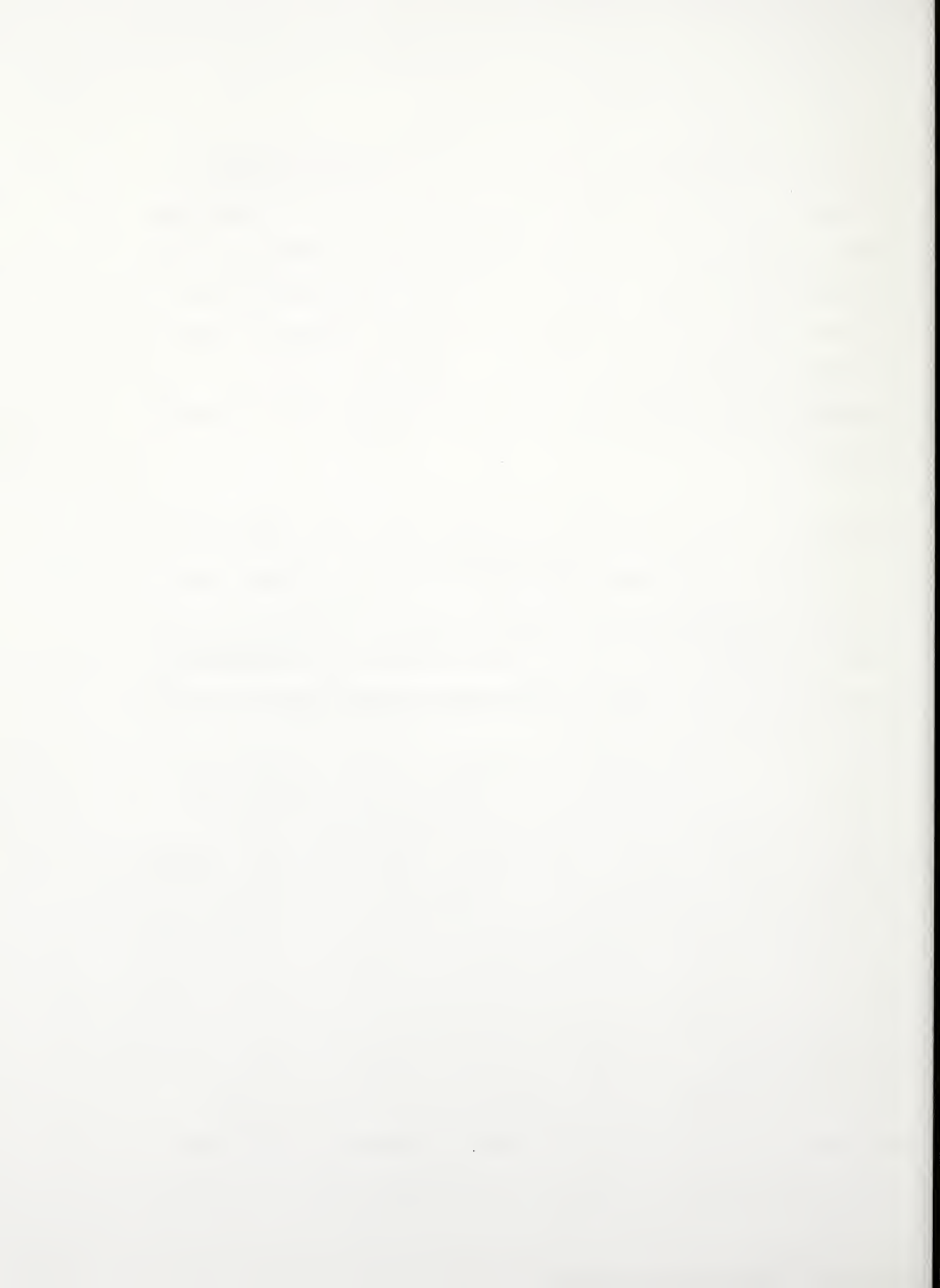




THIS IS THE ORAL HISTORY RESEARCH OFFICE OF MEMPHIS STATE UNIVERSITY. THIS PROJECT IS "AN ORAL HISTORY OF THE TENNESSEE VALLEY AUTHORITY." THE PLACE IS EAST LANSING, MICHIGAN. THE DATE IS MARCH 5, 1970. THIS IS INTERVIEW NUMBER TWO AND IS WITH MR. RICHARD NIEHOFF, FORMERLY WITH THE TENNESSEE VALLEY AUTHORITY. THE INTERVIEW IS BY DR. CHARLES W. CRAWFORD, DIRECTOR OF THE MEMPHIS STATE UNIVERSITY ORAL HISTORY RESEARCH OFFICE.

NIEHOFF What I've been describing about the additional activities made available to professional and managerial employees is, essentially, the work for which I had direct responsibility. My colleagues in the training division were involved in a number of other educational activities which I will describe very briefly.

 TVA did have some schools. They started out, essentially, with the inheritance from the old World War I program at Muscle Shoals. There was a school available there. The early policies of the TVA made Norris and the school at Muscle Shoals sort of demonstrations, with schools in or near operational centers or construction camps, which were necessary for the education of children of employees related to or involved in TVA programs. The effort in all of this was to make of these schools not only places that would be satisfactory for the education of the employees' children in out-of-the-way places other than Knoxville, Chattanooga and other urban centers, but



to use the schools experimentally as institutions which focused a bit more on conservation education than would be normal, with experimentation with curriculum and teaching methods and so forth. Much of the new subject matter derived directly from TVA's efforts in reforestation, agriculture rehabilitation, and related conservation subjects.

There was also a library program. Again the same kind of reasoning about multiple-purpose use of resources was applied to the library program. For example, libraries would be made available at construction camps, made up of books that would be useful for increasing job performance of the workers, as well as for their recreation. This plan was also used (particularly with mobile units developed largely by Miss Mary Utopia Rothrock) to bring to the areas immediately adjoining construction camps, in the first instance, and later through contacts with state library services, a program of extension library service.

CRAWFORD Who was in charge of education at the construction projects?

NIEHOFF I don't recall all the persons, but one of the principal persons was a very fine woman by the name of Virginia White James at Muscle Shoals, and also the principal of the Norris High School, who later became President of Ole Miss. The work with the two TVA schools and with Valley Educational Organizations was initiated and supervised by Floyd W. Reeves and Maurice F. Seay. Reeves left TVA in January 1936 to return to the University of Chicago and Seay left a year or so later to take up a professorship at the University of Kentucky.



There were also efforts with State Departments of Education in the Valley States and other educational groups for the production of curriculum materials. Almost all Valley educators knew that there was insufficient attention paid to conservation education subjects in normal classroom materials available for elementary and high schools.

This materials production work included references to work of the TVA as an agency, but also to the problems of the valley, if you please. There were topics like water control and soil conservation, the improvement of forests, the elimination of forest fires, and similar topics which school children need to know about and in some instances could actually and actively participate in. One of the persons that comes to mind in this connection is Ellis Hartford, who was with TVA for a number of years. Among other assignments, Hartford tried to make articulate and knowledgeable for wide audiences, some of the profound ideas of Harcourt Morgan, one of the members of the Board, who was a philosopher of conservation and whose influence on TVA, I'm sure, was very profound. One of the results of Hartford's work was the publication of "A Common Mooring," which articulated Morgan's basic concepts.

A very major program of the training division of TVA was concerned with crafts and apprentice training. It was quite clear that the South, being basically less industrialized than other areas of the country, particularly the Eastern seaboard, had a smaller number of qualified craftsmen, and in some highly technical fields like hydro-engineerings, etc., a very small number, indeed. So the craft and apprentice training program was primarily concerned with upgrading the



qualifications of people who worked with their hands and their heads. The work that I was particularly responsible for was more concerned with the white collar and the professional workers.

While all this was going on, there were groups of students from valley universities, and from colleges and universities outside of the valley who sent groups of students with their professors to the TVA to learn what was going on and to see for themselves what newspaper and magazine articles and books were reporting about the development of the river system, the reforestation program, the expansion of industry, and other developments going on in the valley. I can recall, particularly, some extremely active student groups who came several years from Vassar College, from Northwestern University, and from other institutions. These field trips were built into some of the institutions as an integral part of their educational programs. There were also a few students who were doing advanced graduate work. The first, I believe, who received a Ph.D. on the basis of work done as a graduate student, was a chap by the name of Ransmeir, who got his Ph.D. from Vanderbilt University.

As you may know from other records about me, I left TVA in 1942 to become the Director of Training for the Office of Price Administration, where I stayed for a relatively short time. After about 13 months, I had an opportunity to broaden my professional experience by becoming the Director of Administrative Relations of the National Housing Agency, which was headed by John B. Blanford, who was the first general manager of TVA.

CRAWFORD Did you think of returning to TVA when you left at that time?



NIEHOFF No, I didn't. I had resigned. Although happy and immensely stimulated by my experience in TVA, I think no one should spend all his life in one position. At least I felt that way, in spite of the fact that a number of my good colleagues at TVA had their total professional career in TVA. I, however, wished to broaden my experience. This opportunity arose during the war years with this first opportunity at the Office of Price Administration and then subsequently at the National Housing Agency, where I was responsible for training, organization and personnel policy. The National Housing Agency was a central organization responsible, during the war years, for the coordination of sixteen housing organizations like Federal Public Housing Agency, the Federal Home Loan Bank, the FHA, and other parts of the housing complex. This was my work between 1943 and 1946.

When I wanted to broaden my experience still further and have an international experience, the people in the State Department were particularly interested, because of the world interest in TVA, to involve me in India. I accepted an appointment as Public Affairs Officer for Bombay. But approximately at the same time that appointment to this position was being consummated, the Atomic Energy Commission (AEC) was being created. The AEC took over from the Manhattan Engineering District, and Mr. Lilienthal was named as its first chairman. Mr. Lilienthal needed, at that particular moment, somebody to assist on the management side to get the commission underway. I expected to be there for a relatively few weeks on leave from the State Department. But my job entailed creating suggestions for the Commission and the Acting General Manager regarding the employment



of the general manager, secretary, and other key officials of the Commission, the creation of the basic organization structure, and the establishment of the personnel policy. I was aided in these tasks by some part-time consultants to the Commission, who were persons of my selection.

However, the work was of such demanding character and so urgent that I was persuaded by the person who was named as the General Manager, Carroll L. Wilson (who is now a professor at M.I.T.), to serve as his Special Assistant, and to give up my desire to live and work abroad. This I did with enthusiasm, I guess it's fair to say, and with pleasure, because it was extremely exciting and a very rich opportunity. But four years of working in a super secret agency where one's every action was under scrutiny and where you have various restrictions, was not entirely to my liking.

After four years of this, I was ready for a change, and at this point in time TVA, interestingly enough, was looking for a person who would come back to head the training branch and serve as an assistant to the Director of Personnel, who then happened to be Harry L. Case. My enthusiasm for TVA and the particular, almost tailor-made, kind of job description that was offered me by Harry Case was quite attractive and I readily agreed to return to TVA in 1950. I had no particular expectations of spending the rest of my life with TVA, but the particular kinds of work that were assigned to me seemed to offer new and fresh opportunity, which I readily embraced.

In addition to the work in the Personnel Department, I was given responsibility for the educational relations of TVA. For the work on educational relations I reported to the general manager. There



were two or three ideas there perhaps worth recording in this connection. TVA persisted in its desire to make its technical materials and its experience available to scholars in relevant fields. For example, by this time TVA had probably acquired more knowledge about how to manage an integrated power system than anyone else. It was, indeed, the largest power system in the world. There were subjects and problems in this field that might, indeed, be of some interest to scholars in various branches of engineering. Likewise, almost any number of subjects in the field of hydraulics, in the management of a multiple purpose river development system, and in other areas such as forestry, the development of new approaches to agriculture, and related subjects of TVA's experience were unique.

Fortunately, at this time an organization had come into being called the Board for Southern Regional Education, which was not only interested in TVA's kind of experience that might be available to scholars, but other organizations as well. So one of my jobs was to work with committees of the Board for Southern Regional Education in the preparation of a brochure which cataloged the several opportunities available for research, principally for graduate students in fields as indicated above. The TVA Board was also interested, after many years of experience in working collaboratively with the land grant universities and other Valley institutions, in developing a more formal and a more comprehensive type of agreement and set of relationships.

It was on this job that A. J. ("Red") Wagner, then assistant general manager, and I visited with each of the land grant universities and their principal personnel in the formulation of what we called "master contracts". These contracts set forth the mutuality of interests between the TVA and the universities under which specific



contracts of a mutually beneficial character were entered into as a part of TVA's broad strategy of institution building. In addition, an annual conference between the presidents of the land grant universities and the TVA Board was established. The agenda for the meetings were developed from both sides - that is, some of the problems and ideas derived from the universities and some from the TVA. I served as the Secretary of this annual conference, visiting each of the universities from time to time to develop these agenda and to work particularly and intensively with the university president, who, in any particular year, served as the chairman of the conference. The chairmanship was rotated between the presidents of the several institutions. I also followed up on some of the decisions taken and programs which were agreed upon at the conferences.

During a portion of this period of five years, we were engaged on going through the first - no, I shouldn't say the first, but a major crisis on the management side. The earlier ones, coming in the earliest years of TVA, were more nearly legal or constitutional crises, when it was not clear from day to day precisely whether there would be a TVA or not, depending upon the decisions of the Supreme Court in the Ashwander case, the Eighteen Power Company case, and others. But this was a management crisis when the chairman of the TVA, Gordon Clapp, was not reappointed by President Eisenhower at the expiration of his term and General Vogel, previously and long associated with the Army Engineers, was named as chairman of the TVA. Others besides myself can describe the tortuous times that occurred when Mr. Vogel succeeded Gordon Clapp.



But one little element that was particularly pregnant in meaning for education was the fortuitous invitation of Florida State University to give a course at Florida State on the TVA, covering essentially the first 20 years of TVA. In collaboration with faculty members and officials of Florida State, we devised such a program that was of particular interest to Dr. Curtis, a member of the Board, who was not at all sure that the TVA, as it was known to many of us in its first 20 years, would not in one way or another be so substantially modified in its character as to be, perhaps, unrecognizable. Thus, the opportunity to give a systematic course at Florida State, coming at this particular time, was most propitious, because Dr. Curtis and some of the rest of us believed that the documentation of TVA's basic strategy, of its essential achievements, of its methods of work, of its outlook, and an orderly description of its legal basis for operation was worth recording, so that if something did happen to TVA, there would be an accurate and vital record left for posterity to examine. Lectures on the topics indicated above and other topics of critical importance were given by key TVA officials. They were in quite good academic order. We did employ Roscoe Martin, then of Syracuse University, to edit these lectures and prepare them for publication by the two presses of universities we were most closely affiliated with, namely, the Universities of Tennessee and Alabama.

Mentioning this particular trio of universities (including the University of Kentucky), I might also mention a special program in public administration training in which the three universities and the TVA (as a fourth partner) designed



and carried out a common curriculum for students in public administration taken at the universities, with summer internships at the TVA.

Another type of assignment which was of special significance and interest to me derived quite accidentally. It seems as if a number of visitors to TVA, some from within the valley and some without, were somewhat surprised that in TVA's public facilities they found segregated toilets and drinking fountains. This distressed some people and they made their distress, or annoyance, clear to the TVA Board. At this time the Board saw fit to take official cognizance of this particular problem and, in a sense, commissioned me to make something of an inventory of these problems and others related to the employment of Negroes. There was a statutory requirement that Negroes be employed in proportion to their numbers in the several valley states, but it was well known that most of these persons were employed in lower level jobs. While examining an approach to working on these problems, it was called to my attention that a professor by the name of Joseph Lowman, then associated with the University of Chicago, who had formerly been Executive Secretary of the "Commission on Segregation in the Nation's Capitol", would be a wise and temperate analyst and consultant, whose experience would be helpful.

I visited with Dr. Lowman and we mutually agreed that the thing to do was to make an honest spot check of the public facilities of TVA and to conduct a series of conferences, particularly on the employment of professional and higher level Negroes in the organization, directly with the responsible heads of divisions and departments. This we did concurrently, as we went throughout the valley holding these informal discussions and examining the public facilities. We found, for the



most part, a positive receptivity on the part of the principal supervisors of personnel to the employment of qualified Negroes at higher levels. The problem seemed to be, largely, whether or not there were qualified Negroes who were willing and interested in coming to TVA. Further examination of this problem revealed that there was an expectation on the part of some highly qualified Negroes that they would not have the same professional opportunities in the TVA, not necessarily because of TVA, but because of the total environment, and therefore they were reluctant to apply. Furthermore, we found that some professors in Negro institutions or in non-segregated universities were reluctant to advise their highly qualified Negroes to accept employment with TVA.

Therefore, it was quite clear that special kinds of recruitment efforts would need to be made in order to enlarge this number of persons in the employ of TVA. And subsequent steps were taken to achieve this by the Personnel Division. As to segregated facilities, it was quite clear that whatever sound and good reasons TVA initially employed to adapt themselves to the folkways and mores of the environment in which these dams and other public facilities were located, that perhaps enough social change had occurred since the early beginnings of TVA to make these segregated facilities somewhat obsolete. It was Joe Lowman's opinion that that time had arrived. If the TVA as a prestigious institution, a national institution, if you please, would choose to eliminate these tokens and symbols of segregation, it would be fairly acceptable to the public and be understood. It was Lowman's view that the facilities in the power houses, reception rooms and other facilities, which were characteristically very attractive, would have two undesignated



drinking fountains, instead of a white and colored facility for drinking, and two undesignated toilets for men and two for women. This recommendation was made to and accepted by the Board, and Lowman's predictions that these changes would be widely acceptable to the public were indeed borne out.

CRAWFORD What year was that, sir?

NIEHOFF That was about, well, it must have been somewhere about 1952 or 1953.

CRAWFORD That was ahead of the Supreme Court decision in '54?

NIEHOFF Yes. Up to this point, what I've been describing - perhaps in too pedestrian a manner - was my own small part, professionally, in the work of the TVA. But perhaps it's clear that by the nature of my work, being primarily concerned with ideas, fostering them, organizing them, inventing them for a wide variety of employees, listening to innumerable lectures, etc., I was in an unusual position to make some general observations about the character of TVA and what really made it tick. In addition, some years away from TVA, several of which I have lived abroad, and the last ten of which I've been associated with an American university, gives me perspective and time to look back upon the TVA with some objectivity, perhaps, and some perspective.

 The thing that comes back very often is an enormous appreciation for the quality, the provisions and the scope of the TVA Act itself. As many people know, it incubated in the halls of Congress for some 17 years. In that process of debate, starting



initially with the problem of disposition of Muscle Shoals until its final passage, there was created in the Act a blueprint for comprehensive multiple purpose regional development involving engineering, forestry, agriculture, land use and other aspects of conservation. The special provisions for management, including decentralization of responsibility to the Board of Directors located in the Valley, the merit system of personnel administration and other fiscal, legal and managerial powers were essential to the management of a highly creative enterprise.

Number 2: the combination of the depression years, the limited opportunities for employment, particularly in organizations that had a creative job to do, plus the fact that the personnel department had the good judgment and the legal basis for employing people with unusual capabilities to do the job (particularly for younger people, a very open-ended promotional opportunity) made it possible to bring together at TVA, from the valley and outside the valley, an unusual group of dedicated and serious and competent people.

Three: the way in which management evolved in the TVA had a very wholesome effect and created a very stimulating environment in which capable people with a broad job to do, a creative job to do, could actually proceed to do it. In the first place, the cardinal provision for personnel administration that all appointments would be on the basis of merit without reference to political considerations meant that a TVA employee could know that the person at the next desk or in the next office was a person who, to the best of the ability of the personnel division, was recruited on his merits, and therefore, he could assume that, whether he was an engineer or an



accountant, or a forester, he was a qualified professional. This created a kind of a tone and respect and acceptance that was pretty fundamental in the tone and operations of the TVA.

The decentralization away from Washington made it possible for the staff to concentrate on the job at hand without being concerned intimately and daily with persons working in other governmental programs, whether they were in the same field or not, was important. There were some small disadvantages to this, but I think on balance it was enormously advantageous to the TVA in getting its job done, that we were located in Knoxville in the valley, and not in Washington.

Another element was the clear expression - the clear practice on the part of general management - of respect for expertise. It was assumed that the several divisions were made up of people whose only consideration for employment was their capability, and this was generalized in relationships between the collections of these competent people between the departments and divisions. It also was dramatized in the decision that the Board took to not acquiesce in political pressures, which would have made the location of a particular dam in a place convenient to, in this instance, the political patrons of Senator McKellar. The dam was, indeed, located where it needed to be located for reasons of the geology of the dam site and its particular location in a multiple purpose system and an integrated power system, rather than at a location dictated by political considerations. The decision by the general management and the Board to delay for a total year the location of this dam on the basis of the expert judgment of the engineering staff, was pervasive throughout the staff. Although



other expressions of this policy were not as dramatic as in the case of the location of the dam, the staff was reassured that their technical judgments and expertise were respected. The effect on morale was terrific.

The leadership in the Board and in the upper echelons of the organization were, I think in reflection, men of extraordinary leadership and breadth of view. They were good technicians; they were good strategists; they were good public officials. This goes for Board members, the Director of Personnel, Floyd Reeves, for Gordon Clapp, and essentially all of the top echelon. That does not mean that there were not frictions or differences of opinion, sometimes animated, within the organization. But there was never in my memory any basic question about the motivation or the sincerity of the people who held views and took positions, even though in some instances they were of a mutually exclusive and clashing character, which had to be resolved in an orderly and professional manner. There were also other reflexes on the staff that were of highly positive character.

Let me name a few. The structures, themselves. I think of those of us who saw Norris Dam emerge from its foundations and the subsequent structures, and who had some association with Roland Wank, Mario Biancoli and Harry Tour, and the conceptions that these architects and engineers had to create structures which would be functional, beautiful and architecturally pleasant for, perhaps, as long as a hundred years. And when they actually achieved the design and construction of structures of this quality, the staff had a special pride in being associated with an organization that did work of this quality. Obviously, the structures were a dramatic kind of expression of this point. But as the eroded hillsides started being covered with grass,

and as the statistics on the improved production deriving from better fertilizers began to emerge as facts of the experience of TVA, and, if you please, as these ideas were disseminated through the TVA's own internal documentations and through the training program which I have described earlier, there was a collective pride in the work of the TVA that was constantly stimulating and, from the point of view of the Board, the upper management, and the public, indeed, extremely useful.

Now there were also, in the field in which I am particularly interested, some inventions. I mentioned the provisions of the Act that made it possible to create a personnel system based entirely on merit, but to go from that broad provision to the daily operations of the personnel system which Harry Case and others had developed meant that a number of highly accepted ideas embraced by the United States Civil Service Commission had to be junked. For example, it was believed that you could only manage a merit system if somehow or other you could assign to any applicant a grade, 89, 90, 91, etc., and you could do that so precisely that a person who got a grade of 93, indeed, might be assumed to be a more qualified person than one who got 92. Now, there were not industrial psychologists or personnel managers who could defend that kind of assumption for a minute, but TVA had to invent something that was, indeed, a qualifying standard, but which made no pretense at the nonsense of numerical ratings cut so thin and so precise as would be expressed in a 91, 92 kind of rating performance. Wider, broader categories of qualified, highly qualified, or not qualified, had to be devised with considerable latitude within those categories to find persons who had the best combination of talents to fit a precise



and particular job of TVA. And then again, not only were we administering a better personnel system, some parts and pieces of which are, now, more widely adopted, or adapted, even in governmental agencies, but again, the end product of the process of employing people under these processes meant that you had more respect for the system and more respect for the colleagues who emerged from the system.

Another illustration of better management was the development of performance budgeting, an approach to budgeting and fiscal management that related programs to fiscal requirements. This system of budgeting and fiscal management required the TVA staff to project the objectives and programs that they wished to accomplish, to describe them, to defend them internally and with the committees of Congress, meant a higher, crisper, more precise kind of thinking on the part of the staff than conventional approaches to budgeting, where one takes ten percent more or ten percent less of what you may have gotten in previous years. The concept of performance budgeting, as developed by the TVA, had a reflex effect on the thinking of the staff, which resulted in the use of resources which was sharper, clearer, more functional, and basically more economical and more in the public interest.

THE UNIVERSITY OF CHICAGO PRESS

CHICAGO, ILLINOIS 60607-7073

TEL: 773/936-3400 FAX: 773/936-3401

WWW.CHICAGO.PRESS.EDU

© 2000 THE UNIVERSITY OF CHICAGO PRESS

ALL RIGHTS RESERVED

PRINTED IN THE UNITED STATES OF AMERICA

10 9 8 7 6 5 4 3 2 1

ISBN 0-226-08340-0

HARDCOVER \$45.00

PAPERBACK \$25.00

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

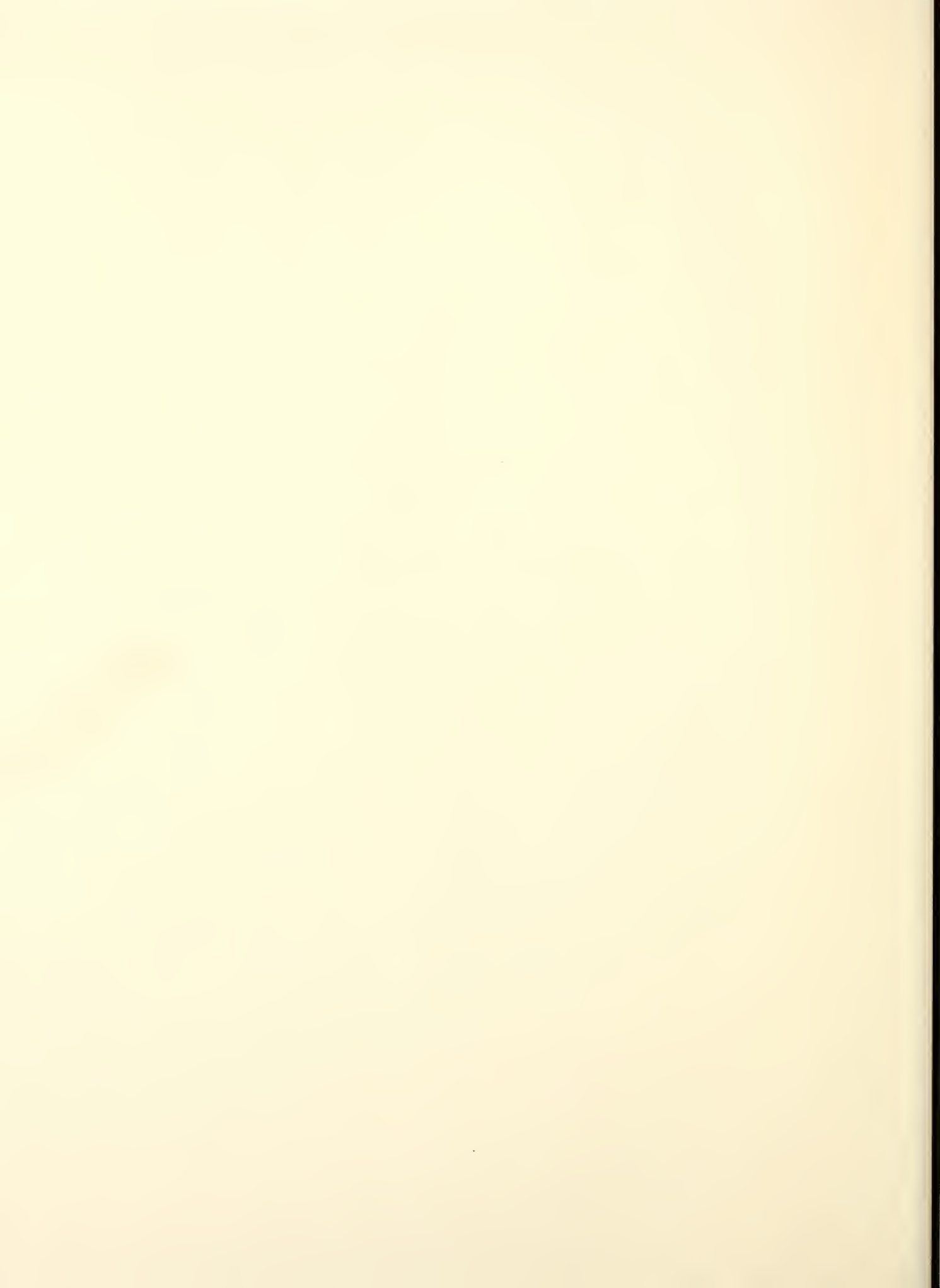
0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0

0-226-08340-0



HECKMAN
BINDERY INC.



 **AUG 88**
N. MANCHESTER,
INDIANA 46962

